

10-18-00

A



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Steven MacWilliams
 Title: LABEL HAVING FOLDING FEATURE
 Attorney Docket No.: 224.013US1



PATENT APPLICATION TRANSMITTAL

BOX PATENT APPLICATION

Commissioner for Patents
 Washington, D.C. 20231

We are transmitting herewith the following attached items and information (as indicated with an "X"):

- X Return postcard.
- X Utility Patent Application under 37 CFR § 1.53(b) comprising:
 - X Specification (17 pgs, including claims numbered 1 through 33 and a 1 page Abstract).
 - X Formal Drawing(s) (5 sheets).
 - X Unsigned Combined Declaration and Power of Attorney (3 pgs).

The filing fee (NOT ENCLOSED) will be calculated as follows:

	No. Filed	No. Extra	Rate	Fee
TOTAL CLAIMS	33 - 20 =	13	x 18 =	\$234.00
INDEPENDENT CLAIMS	6 - 3 =	3	x 80 =	\$240.00
MULTIPLE DEPENDENT CLAIMS PRESENTED				\$0.00
BASIC FEE				\$710.00
TOTAL				\$1,184.00

THE FILING FEE WILL BE PAID UPON RECEIPT OF THE NOTICE TO FILE MISSING PARTS.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
 P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

By: Peter C. Maki
 Atty: Peter C. Maki
 Reg. No. 42,832

Customer Number 21186

"Express Mail" mailing label number: EL618436835US

Date of Deposit: October 17, 2000

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

LABEL HAVING FOLDING FEATURE

Field of the Invention

5 This invention relates to the field of labels, and more specifically to labels for applying to file folders, folder tabs, and other stock members.

Background

10 In many document filing systems, labels are applied to file folders so that the label is located along an edge of one of the folder tabs. The labels are readily visible when the file folders are stored in cabinets or on shelves.

 When the labeled folders are put in drawers or on a shelf it is desirable for all the indicia on each label to align from one folder to the next. This is so that when thousands of files are being labeled and stored, any misfiles can be instantly caught
15 by sight. For such a system to work efficiently, the labels must be consistently aligned and the information on each label readily observable.

 The application of the labels to the folder tab, however, is problematic. This is because a single user and/or multiple users cannot consistently align or fold each label onto each folder in an exact position so that the correct portion of the label is
20 on each side of the folder tab consistently. Moreover, a user may need to change or replace a label on a folder since the information on the label needs to be updated. However, placing a new label over the label already on the folder may cause the old label to partially show through the new label and make it hard to read the new label.

Summary

25 Accordingly, for these reasons and others, a label and method providing for ease of placement, alignment, and readability have been developed. An exemplary label includes a first layer having a first label surface adapted to being printed on and a second layer on a second surface of the first layer. The second layer includes

two or more sections, wherein between each of the two or more sections is a gap, each gap defining a fold-line section in the first layer. The second layer covers substantially all of the bottom surface of the first layer except for the fold-line section.

- 5 Another aspect of the present invention provides a label having a first layer and a second layer. The second layer includes at least two sections separated by a gap which is discernible through the first layer.

 Another aspect of the present invention includes a method of applying a label to an edge of a stock member. The method includes applying a first portion of
10 the label to a first side of the edge of the stock member, folding the label along a weakened fold-line running along a surface of the label, and applying the second portion of the label to a second side of the edge of the stock member.

 Among other advantages, the present invention provides a label and method for assisting a user in quickly and consistently applying and aligning labels.

15

Brief Description of the Drawings

FIG. 1 shows an isometric view of a label form according to one embodiment of the present invention.

FIG. 2 is an exploded isometric view of the label form of FIG. 1.

- 20 FIG. 3 is a top view of the label form of FIG. 1.

FIG. 4 is a top view of a label form according to another embodiment of the present invention.

FIG. 5 shows the label of FIG. 1 after the label has been applied to a folder.

FIG. 6 shows a side view of the label of FIG. 1 applied to a folder.

- 25 FIG. 7 shows a side view of the label of FIG. 4 applied to a folder.

FIG. 8A shows a top view of a label form sheet according to one embodiment of the present invention.

FIG. 8B shows a section view of the label of FIG. 8A.

FIG. 9 shows a label in accord with another embodiment of the present invention.

FIG. 10 shows the label of FIG. 9 applied to a three-sided index tab.

FIG. 11 is a top view of a label according to another embodiment of the present invention.

5

Description

In the following detailed description, reference is made to the accompanying drawings that form a part hereof, and in which are shown by way of illustration specific embodiments in which the invention may be practiced. It is understood that other embodiments may be utilized and structural changes may be made without departing from the scope of the present invention. It is also noted that “first,” “second,” “top,” and “bottom” and the like are to be taken in the context of the description and the Figures and are not be taken in an absolute limiting sense.

The description herein will discuss a label form and the application of a label to a file folder. However, it is to be understood that the discussion is merely exemplary and is not meant to limit the use of the exemplary labels to document storage file folders and the like, and that many other uses and applications are within the scope of the present invention.

Figures 1 and 2 show an exemplary label form 100. Figure 1 shows an isometric view of label form 100, while Figure 2 shows an exploded isometric view of the label form. Label form 100 includes a label 101 which is removably attached to a backing member 130. Label 101 includes a first layer 110 and a second layer 120.

First layer 110 is a label member which, in one embodiment, has a top surface 111 adapted to being printed on and a second surface 112 having an adhesive, such as a pressure sensitive adhesive, applied thereon. First layer 110 also includes a foldable section or fold-line section 115 which is generally located between a first label portion 116a and a second label portion 116b. As will be discussed below, the relative sizes of the portions 116a and 116b of layer 110 can be

varied, and thus, the location of foldable section 115 can be anywhere along first layer 110.

In this embodiment, first layer 110 is a light-colored label material which is at least partially translucent so as to permit light to be seen through it. By way of example, but not limitation, such colors include white, yellow, blue, or other light colors. In some embodiments, first layer is a dark color material or a dark color material having a lighter section, as will be discussed below. Layer 110 can be made from a variety of materials such as paper, vinyl, or other plastic composite material.

In the exemplary embodiment, second layer 120 is a label member which includes a first side 123 attached to side 112 of first layer 110. In one embodiment, side 123 includes an adhesive for being attached to side 112. In other embodiments, as discussed above, the adhesive is on the first layer 110. A second side 124 of layer 120 is removably attached to a backing layer or backing member 130. The surface of side 124 has an adhesive, such as a pressure sensitive adhesive, for applying label 100 to a stock member, such as a folder (see Figure 5).

In the exemplary embodiment, second layer 120 includes two sections, 121a and 121b, having at least a partial gap or section 122 therebetween. In some embodiments, as will be discussed below, layer 120 includes more than two sections and more than one gap. In this embodiment, gap 122 is a section in the second layer where there is complete separation between the two sections 121a and 121b of the second layer. However, in some embodiments, gap 122 may only partially separate the two sections. For instance, gap 122 may only run a partial distance along layer 120 so that sections 121a and 121b are partially connected and partially disconnected. In other embodiments, gap 122 may be a series of perforations, notches, or other partial or complete discontinuity in second layer 120. Thus, the term gap is to be taken as a portion of second layer 120 where there is some discontinuity in the layer.

In one embodiment, second layer 120 is made of a material which is darker or more opaque than the first layer 110. In one embodiment, it is a security label material. In other embodiments, by way of illustration and not limitation, second layer 120 may be black, brown, dark blue, green, or other color or opaque material
5 which permits less light through it than layer 110.

In some embodiments, instead of a discrete material, second layer 120 is a pigment or paint applied directly to the bottom of first layer 110 with gap 122 being defined by where there is a discontinuity of pigment in bottom layer 120 or where a lighter pigment is applied to the bottom of layer 110.

10 In one embodiment, gap 122 is established by a change in the translucency or color of layer 120. For instance, instead of sections 121a and 121b, layer 120 can include a single strip with a more translucent portion left as the gap. In other embodiments, as noted above, gap 122 is a narrow strip, a series of perforations, a scored or notched line, or other feature which provides for ease of bending and/or
15 allows a user to visually see where the fold-line is, as will be discussed below.

The gap 122 in second layer 120 defines or establishes where fold-line section 115 is in the top layer. In one embodiment, the gap provides that first layer 110 naturally folds along fold-line section 115 when a folding force is applied to label 101. This means that the label is has a tendency to fold on fold-line section
20 115 when pressure is applied to the label. In other words, without being specifically manipulated by the user, the label automatically bends or creases along the weakened foldable section. Among other advantages, this provides that any user of a label such as label 101 will always fold the label consistently when applying it to a stock member such as a folder, an index tab, an envelope, or other item being
25 labeled. It also helps ensure that each label will have a consistent placement on the stock member and it helps ensure that each label will have a neat and consistent appearance.

In the exemplary embodiment, the second layer 120 covers substantially all of the bottom surface 112 of first layer 110 except for fold-line section 115. This

provides that the label will not bend except at the pre-determined fold-line section 115.

Figure 3 shows a top view of label 101. As noted above, in one embodiment, first layer 110 comprises a light, transparent or translucent material and second layer 120 includes a dark, or more opaque material. This provides the label with a contrast portion so that user can see fold-line 115. The view of Figure 3 indicates how light can shine through gap 122 and clearly show the user the correct fold-line. This visual indicator is advantageous for helping a user consistently and quickly apply the label to a stock member, since they will know where it will bend.

Moreover, if the second layer is a dark or opaque material, such as a security label, the label can be put over an old label and the old label will not show through the new one. This provides for a quick way to update file information without having to redo a whole new file folder.

In the embodiment of Figure 1, label 101 includes an approximately centered gap 122 and fold-line 115. In other embodiments, the fold-line is offset from the center-line of the label.

Figure 4 shows a top view of a label 201 according to another embodiment of the present invention. Label 201 has an off-center fold-line 215 defined by the presence of an off-center gap 222 within the second layer. This causes the label to fold correctly, even if a user does not realize that the label was to fold that way (i.e. not symmetrically). In one embodiment, when the two layers have contrasting color tones (or different opacities), this can be helpful in allowing the user predict where the label will bend so that they can align it correctly on the edge of a stock member. In other words, although the user cannot see through the darkened second layer, they can still perceive the fold-line to align and fold the label consistently.

Figures 5 and 6 show a perspective view of label 101 folded over the edge of a folder 301 and a side view of label 101 applied to the folder, respectively. As noted above, folder 301 is merely exemplary and the label can be used with any

stock member. Folder 301 includes a portion, such as a tab 304, adapted to receive a label.

To apply label 101, a user removes label 101 from backing member 130. The fold-line is visible because of the contrasting layers. After being aligned, the first portion of the label is applied to the front of tab 304. When the user starts to apply a folding pressure such as applying pressure on the edges of the label or using a folding motion, the presence of gap 122 between portions 121a and 121b cause the label to fold along line 115. The second portion of the label is then folded over the edge of tab 304 and applied to the other side of the tab so that the final result looks like the labeled folder 301 of Figures 5 and 6, in which the two portions of the label member are applied on opposing surfaces of tab 304. The features of label 101 provide that a user will always get a consistent fold in the label, and that multiple users will always get the same fold. In one embodiment, when the first layer and the second layer are label materials, the presence of at least two label layers 110 and 120 provides a thicker, stiffer end-tab for the folder than a single layer label.

Figure 7 shows a side view of label 201 (see Figure 4) applied to a folder. As noted above, label 201 has an off-center fold-line 215 and gap 222. As discussed above, the presence of gap or section 222 within a second layer 220 causes the label to fold correctly, even if a user does not realize that the label was to fold that way.

Figure 8A shows a top view of a label form sheet 800 according to one embodiment of the present invention. Label sheet 800 includes six label members such as labels 101 discussed above. It can include any number of labels.

Figure 8B shows a sectional side view of label sheet 800. In one embodiment, label sheet 800 is constructed as follows. Layer 820 is attached by a pressure sensitive adhesive to backing member 830. Second layer 820 includes one or more gap sections 822. In this embodiment, second layer 820 is a dark material. First layer 810 is attached to the top surface of second layer 830. The first and second layers are die cut or cut by other means at an edge 831.

In one embodiment, each label member of layer 810 is attached to at least two sections of second layer 820. Each of the one or more label members of layer 810 includes perimeter edge 831 which matches an edge of the at least two sections attached to the label member. As noted above (see Figures 3 and 4), labels 101 can
5 be centered or off-center relative to gaps 822.

In various embodiment, the labels can be pre-printed, or blank and printed by the user. Advantageously, in the present embodiment, the first layer and the backing member each comprise a substantially planar surface, wherein the substantially planar surfaces are substantially parallel to one another. This provides ease of use in
10 a printer since no raised edges can get caught in the printer.

Figure 9 shows a label 901 in accord with another embodiment of the present invention. In this embodiment, the second layer of label 901 has two gaps 922a and 922b. This provides two fold-line sections 915a and 915b in the first layer of the label.

15 Figure 10 shows label 901 applied to a three-sided index tab 1001. The two fold-lines 915a and 915b providing a user with automatic folding sections so that the label will not be misapplied.

Figure 11 shows a top view of a label 1101 according to another embodiment of the present invention. Label 1101 includes a gap 1122 which
20 comprises a series of perforations in the second layer of the label. The perforations provide a weakened fold-line 1115 in the first layer. As noted above, in other embodiments, the gap can be a narrow strip, a series of perforations, a scored or notched line, or other feature which provides for ease of bending and/or allows a user to visually see where the fold-line is.

25 In other embodiments of the present invention, more or fewer fold-lines can be provided than shown in the exemplary embodiments, depending on the application. Moreover, the shape of the fold-lines can be varied. For instance, gaps such as gap 122 can be other shapes that provide for use on odd shaped folders. For

instance, a gap can be contoured to correspond to the contour of an end-tab folder, to provide for physical and visual guidance in applying the label.

Conclusion

When labeled folders are put in drawers or on a shelf it is desirable for all the
5 indicia on each label to align from one folder to the next. However, it is often difficult to apply each label correctly so it is consistent with the other labels. Typically, a single user and/or multiple users cannot consistently align or fold each label onto each folder in an exact position so that the correct portion of the label is on each side of the folder tab consistently. Moreover, a user may need to change or
10 replace a label on a folder since the information on the label needs to be updated. However, placing a new label over the label already on the folder may cause the old label to partially show through the new label and make it hard to read the new label.

Accordingly, for these reasons and others, a label and method providing for ease of placement, alignment, and readability have been developed. An exemplary
15 label includes a first layer having a top surface adapted to being printed on and a second layer proximate to the bottom surface of the first layer. The second layer includes two or more sections having a gap therebetween. Each gap in the second layer defines a fold-line section in the first layer. The second layer covers substantially all of the bottom surface of the first layer except for the fold-line
20 section. Another aspect provides a label having a first layer and a second layer attached to the first layer and having at least two sections separated by a gap, the gap being discernible through the first layer. Among other advantages, the present invention provides a label and method for assisting a user in quickly and consistently applying and aligning labels so that each label will be applied quickly,
25 consistently, and with the same alignment as the labels applied before and after.

It is understood that the above description is intended to be illustrative, and not restrictive. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description. The scope of the invention should, therefore,

be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled.

What is claimed is:

1. A label comprising:
a first layer having a first surface adapted to being printed on and a second surface; and
a second layer proximate the second surface of the first layer, the second layer comprising a first section and a second section having a gap therebetween, said gap defining a fold-line section in the first layer, the second layer covering substantially all of the second surface of the first layer except for the fold-line section.
2. The label of claim 1, wherein the first layer folds along the fold-line section when a folding force is applied to the label.
3. The label of claim 1, wherein the gap comprises a series of perforations.
4. The label of claim 1, wherein the gap comprises a section of complete separation between each of the two or more second layer sections.
5. The label of claim 1, wherein the gap comprises a discontinuity in the second layer.
6. The label of claim 1, wherein the fold-line section is offset from a centerline of the first layer.
7. The label of claim 1, wherein the second layer has at least two gaps and wherein the label is foldable upon a three dimensional tab member.

8. The label of claim 1, wherein the second layer has a thickness wherein the second layer does not bend substantially when a folding pressure is applied to the label.
9. The label of claim 1, wherein the second layer comprises a material which is darker than the material of the first layer.
10. The label of claim 9, wherein the gap is discernible through the first layer.
11. A label comprising:
 - a first layer; and
 - a second layer attached to the first layer and having at least two sections at least partially separated by a gap, the gap being discernible through the first layer, the second layer having an adhesive on a surface for applying the label to a stock member having at least two surfaces;
 - wherein the at least two sections are located on different surfaces of the stock member when the label is applied over an edge of the stock member.
12. The label of claim 11, wherein the first layer comprises a lighter material than the second layer.
13. The label of claim 11, wherein the second layer comprises a darker material than the first layer.
14. The label of claim 13, wherein the second layer comprises a security label material.
15. The label of claim 11, wherein the gap indicates a label fold-line for matching with the edge of the stock member.

16. The label of claim 11, wherein the gap defines a fold-line section in the first layer.
17. The label of claim 16, wherein the first layer folds along the fold-line section when a folding force is applied to the label.
18. The label of claim 11, wherein the gap comprises a series of perforations.
19. The label of claim 11, wherein the gap comprises a section of complete separation between each of the two or more second layer sections.
20. The label of claim 11, wherein the gap is offset from a centerline of the first layer.
21. The label of claim 11, wherein the second layer has at least two gaps and wherein each gap is visible through the first layer.
22. A label comprising:
 - a first layer having a top surface adapted to being printed on and a bottom surface; and
 - a second layer attached to the bottom surface of the first layer, the second layer comprising two or more sections, wherein between each of the two or more sections is a gap, each gap defining a fold-line section in the first layer, the second layer comprising a darker material than the first layer, wherein each gap is discernible through the first layer and indicates the fold-line section of the first layer, the first layer folds along the fold-line section when a folding force is applied to the label.

23. The label of claim 22, wherein the second layer comprises a security label material.
24. The label of claim 22, wherein the gap comprises a series of perforations.
25. The label of claim 22, the gap comprises a section of separation between each of the two or more second layer sections.
26. A label form comprising:
a backing member;
a first layer having a top surface adapted to being printed on; and
a second layer attached to the first layer and removably attached to the backing member and located between the first layer and the backing member, the second layer comprising at least two sections having a gap therebetween, the first layer has a foldable section located along the gap of the second layer;
wherein, the first layer and the backing member each comprise a substantially planar surface, wherein the substantially planar surfaces are substantially parallel to one another.
27. The label form of claim 26, wherein the first layer includes one or more label members, each label member attached to at least two sections of the second layer.
28. The label form of claim 27, wherein each of the one or more label members includes a perimeter edge which matches an edge of the at least two sections of the second layer attached to the label member.
29. The label form of claim 26, wherein the second layer comprises a security label material.

30. A method of applying a label to an edge of a stock member, the method comprising:

applying a first portion of the label to a first side of the edge of the stock member;

folding the label along a weakened fold-line running along a surface of the label, the weakened fold-line located between the first portion of the label and a second portion of the label; and

applying the second portion of the label to a second side of the edge of the stock member.

31. The method of claim 30, wherein the weakened fold-line comprises a section in a first layer of the label which is defined by a gap in a second layer of the label.

32. A method of applying a label to an edge of a stock member, the method comprising:

providing a label having a first layer having a top surface adapted to being printed on and a bottom surface, the label also having a second layer attached to the bottom surface of the first layer, the second layer comprising two or more sections, wherein between each of the two or more sections is a gap, each gap defining a fold-line section in the first layer, the first layer folds along the fold-line section when a folding force is applied to the label;

applying a first portion of the label to a first side of the edge of the stock member;

folding the label along the fold-line section; and

applying a second portion of the label to a second side of the edge of the stock member.

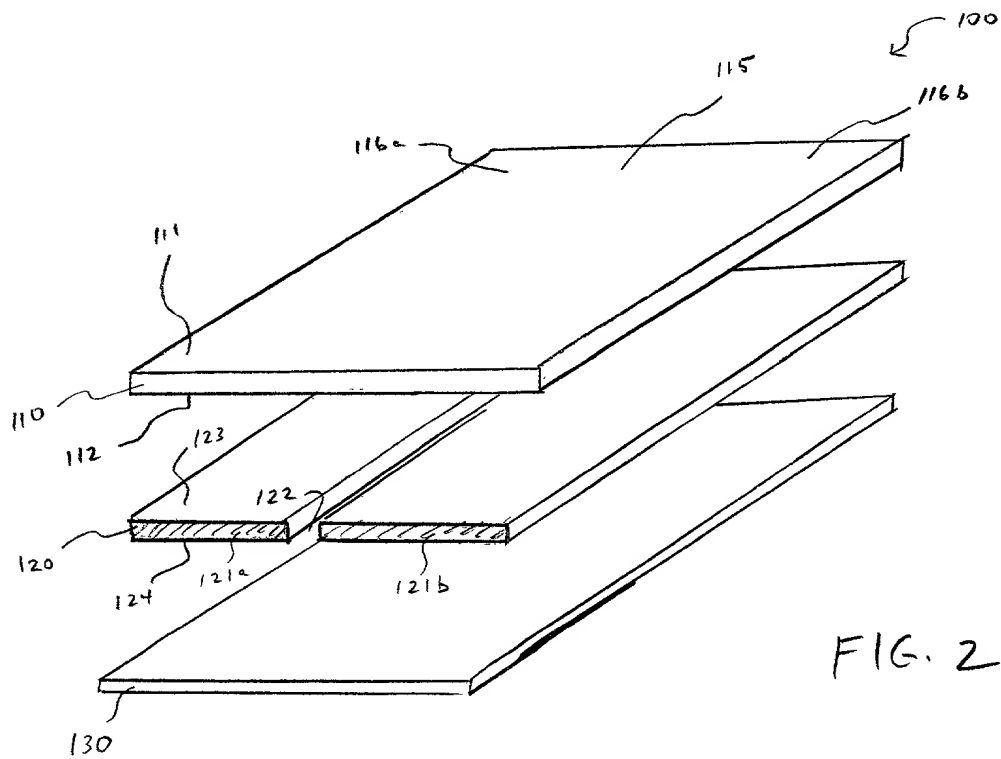
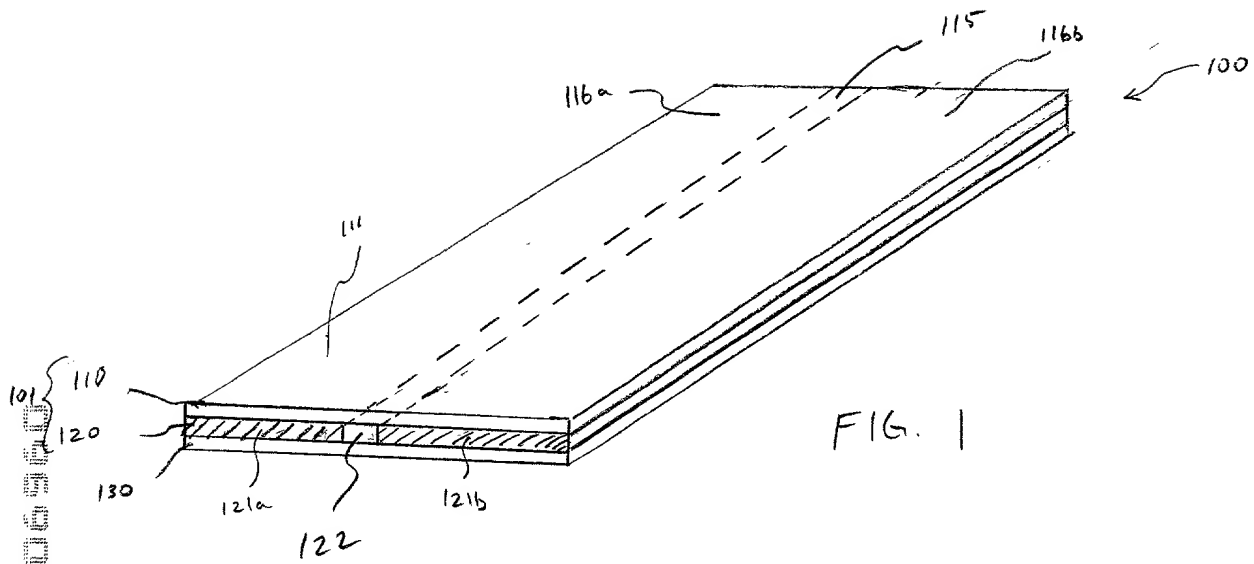
33. The method of claim 32 wherein, the second layer comprises a darker material than the first layer, wherein each gap is discernible through the first layer to indicate the fold-line section of the first layer.

Abstract of the Disclosure

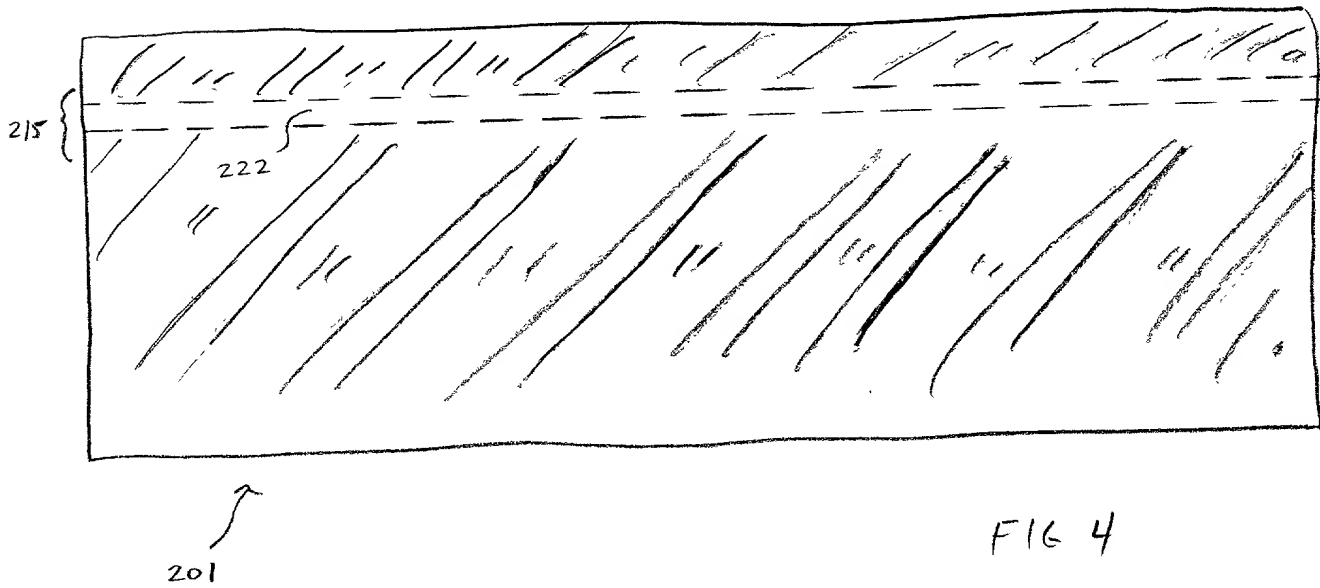
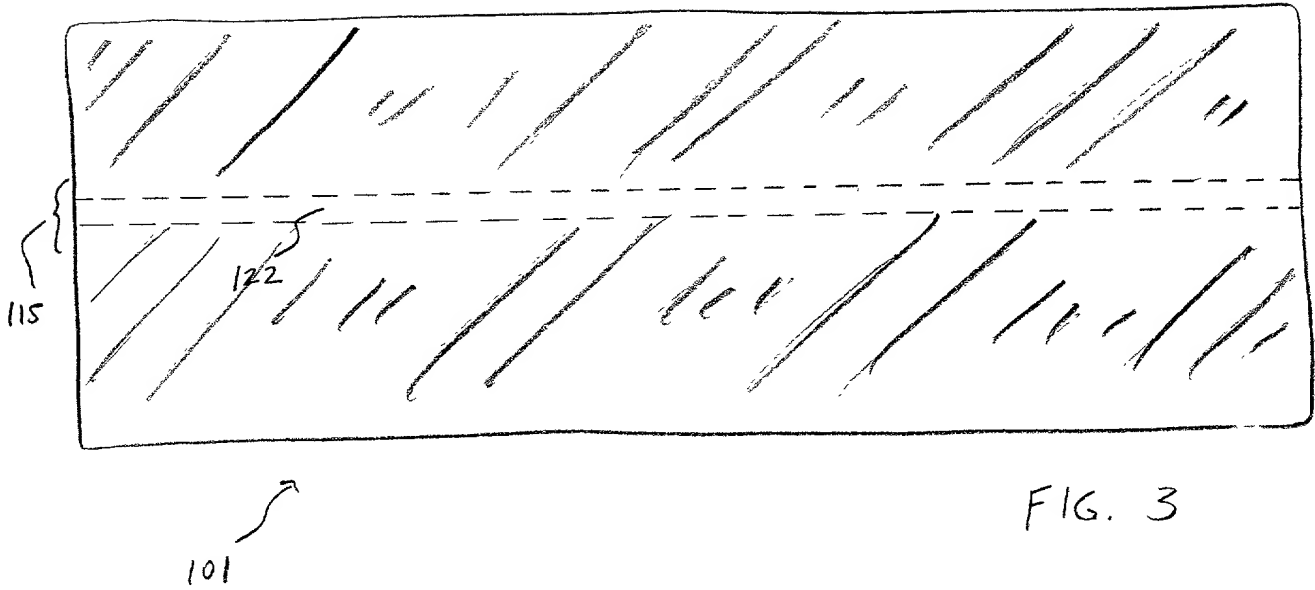
A label including a first layer having a first surface adapted to being printed on and a second layer proximate to a second surface of the first layer. The second layer includes two or more sections having a gap therebetween. Each gap in the
5 second layer defines a fold-line section in the first layer. The second layer covers substantially all of the bottom surface of the first layer except for the fold-line section. Another aspect provides a label having a first layer and a second layer attached to the first layer and having at least two sections separated by a gap, the gap being discernible through the first layer.

10

"Express Mail" mailing label number: EL618436835
Date of Deposit: October 17, 2000
This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80																				



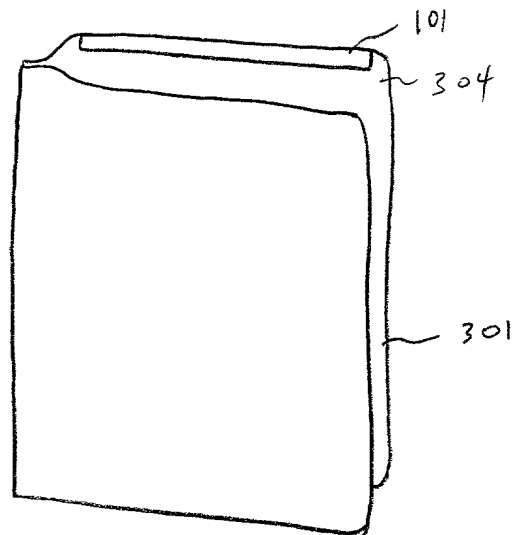


FIG. 5

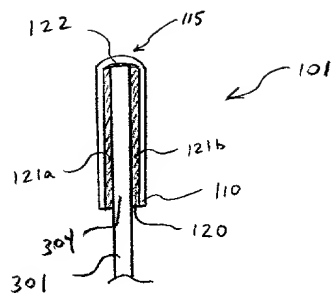


FIG. 6

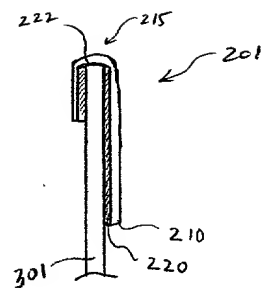


FIG. 7

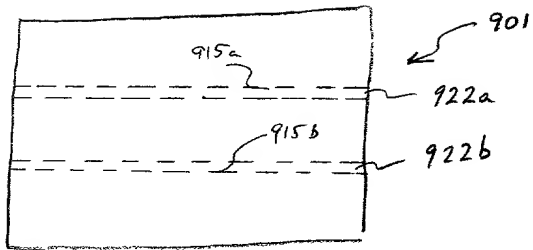


FIG. 9

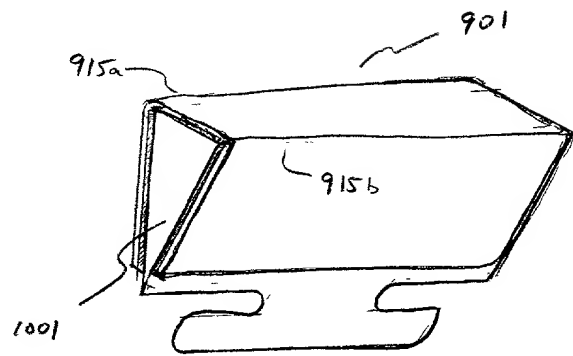


FIG. 10

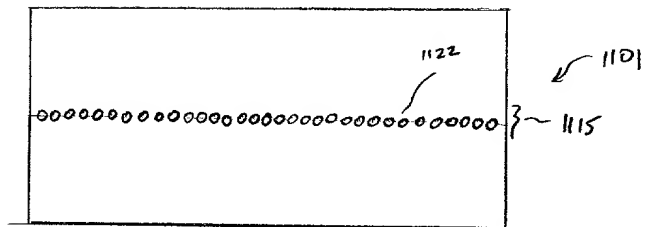


FIG. 11

SCHWEGMAN ■ LUNDBERG ■ WOESSNER ■ KLUTH

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **LABEL HAVING FOLDING FEATURE.**

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. § 1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Anglin, J. Michael	Reg. No. 24,916	Huebsch, Joseph C.	Reg. No. 42,673	Nelson, Albin J.	Reg. No. 28,650
Beekman, Marvin L.	Reg. No. 38,377	Jurkovich, Patti J.	Reg. No. 44,813	Nielsen, Walter W.	Reg. No. 25,539
Bianchi, Timothy E.	Reg. No. 39,610	Kalis, Janal M.	Reg. No. 37,650	Oh, Allen J.	Reg. No. 42,047
Billion, Richard E.	Reg. No. 32,836	Kaufmann, John D.	Reg. No. 24,017	Padys, Danny J.	Reg. No. 35,635
Black, David W.	Reg. No. 42,331	Klima-Silberg, Catherine I.	Reg. No. 40,052	Parker, J. Kevin	Reg. No. 33,024
Brennan, Leoniede M.	Reg. No. 35,832	Kluth, Daniel J.	Reg. No. 32,146	Perdok, Monique M.	Reg. No. 42,989
Brennan, Thomas F.	Reg. No. 35,075	Lacy, Rodney L.	Reg. No. 41,136	Prout, William F.	Reg. No. 33,995
Brooks, Edward J., III	Reg. No. 40,925	Lemaire, Charles A.	Reg. No. 36,198	Schumm, Sherry W.	Reg. No. 39,422
Chu, Dinh C.P.	Reg. No. 41,676	LeMoine, Dana B.	Reg. No. 40,062	Schwegman, Micheal L.	Reg. No. 25,816
Clark, Barbara J.	Reg. No. 38,107	Lundberg, Steven W.	Reg. No. 30,568	Scott, John C.	Reg. No. 38,613
Clise, Timothy B.	Reg. No. 40,957	Maeyaert, Paul L.	Reg. No. 40,076	Smith, Michael G.	Reg. No. 45,368
Dahl, John M.	Reg. No. 44,639	Maki, Peter C.	Reg. No. 42,832	Speier, Gary J.	Reg. No. 45,458
Drake, Eduardo E.	Reg. No. 40,594	Malen, Peter L.	Reg. No. 44,894	Steffey, Charles E.	Reg. No. 25,179
Embretson, Janet E.	Reg. No. 39,665	Mates, Robert E.	Reg. No. 35,271	Terry, Kathleen R.	Reg. No. 31,884
Fordenbacher, Paul J.	Reg. No. 42,546	McCrackin, Ann M.	Reg. No. 42,858	Tong, Viet V.	Reg. No. 45,416
Forrest, Bradley A	Reg. No. 30,837	Moore, Charles L., Jr.	Reg. No. 33,742	Viksnins, Ann S.	Reg. No. 37,748
Gamon, Owen J.	Reg. No. 36,143	Nama, Kash	Reg. No. 44,255	Woessner, Warren D.	Reg. No. 30,440
Harris, Robert J.	Reg. No. 37,346				

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to **Schwegman, Lundberg, Woessner & Kluth, P.A.** at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402

Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of sole inventor : **Steven MacWilliams**
 Citizenship: **United States of America** Residence: **Fullerton, CA**
 Post Office Address: **1211 Anita Place**
Fullerton, CA 92831

Signature: _____ Date: _____
 Steven MacWilliams

Full Name of inventor:
 Citizenship: Residence:
 Post Office Address:

Signature: _____ Date: _____

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.